DETAILED ACTION

The Amendment filed on March 14, 2008 has been entered.

Specification

"SSW" (paragraph 0051, line 2) should be – BSW --.

Appropriate correction is required.

Claim Objections

Claims 17, 24, and 31 are objected to because of the following informalities:

- claim 17, "motor vehicle's operation" (line 3) should be -- motor vehicle operation --.

- claims 24 and 31, "the prescribed motor heat exchanger" (line 3) should be -- the motor vehicle prescribed heat exchanger --.

- claim 31, after "motor vehicle" (line 4) should insert – motor --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17, 18, 20, 21, 23-30, and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Unger et al. (US 6,695,473).

Regarding claim 17, Unger et al. discloses a method (Abstract, lines 1-5) for detecting presence (identifies component 16, Abstract, line 5) or absence of a motor vehicle prescribed heat exchanger (16) (motor vehicle, Abstract, line 1), comprising the following steps which are performed during a motor vehicle's operation:

(S1) observing temperature of a heat-exchanger medium (radiator temperature, Fig. 4) and at the same time observing further current motor vehicle operationally relevant parameters (vehicle speeds, Fig. 4) for a given time window (Fig. 4);

(S2) determining an expected time gradient of the temperature of the heat-exchanger medium (characteristic signature temperature jump, column 4, lines 20-30);

(S3) determining a current time gradient of the temperature of the heat-exchanger medium (ECU 42 observes current temperature behavior, column 4, lines 31-33); and

(S4) detecting the presence of a prescribed heat exchanger based on the expected and the current time gradients of the temperature of the heat- exchanger medium (column 4, lines 31-36).

Regarding claim 18, Unger et al. discloses:

(S1-1) measuring values of the temperature of the heat-exchanger medium in predefined time intervals and plotting the time profile of these values (Fig. 4); and

(S1-2) measuring values of the operationally relevant parameters (vehicle speed, Fig. 4) at predefined time intervals and plotting the time profiles of these values (Fig. 4).

Regarding claim 20, Unger et al. discloses the current temperature gradient is detected in method step (S3) based on the current values of the temperature of the heat exchanger medium in the time window (column 4, lines 18-23).

Regarding claim 21, Unger et al. discloses:

(S4-1) comparing the current and expected time gradients of the temperature of the heat-exchanger medium (column 4, lines 31-36);

(S4-2) taking into account this comparison result with reference to a predefined threshold value (column 4, lines 26-28); and

(S4-3) transmitting data signals when a prescribed heat exchanger (2) is present (via 39, column 4, lines 12-15).

Regarding claim 23, Unger et al. discloses the time window is determined to begin at a first time when at least one operationally relevant parameter reaches a predefined starting threshold value (0 kph, Fig. 4); and the time window is determined to end at a second time when the same or at least one further operationally relevant parameter

reaches the same or a further predefined ending threshold value (between 50 and 100 kph, Fig. 4).

Regarding claim 24, Unger et al. discloses an apparatus (Fig. 1) for detecting the presence of a motor vehicle prescribed heat exchanger (16) (Abstract, line 1), comprising:

the prescribed motor heat exchanger (16) having a heat-exchanger medium for a motor vehicle motor (10) (Fig. 1);

a measuring system (48) for measuring the temperature of the heat-exchanger medium (column 4, lines 17-23); and

an evaluation device (ECU 42) for evaluating data based on the measured temperature of the heat-exchanger medium for detecting the presence of the prescribed heat exchanger (column 4, lines 31-36) (Figs. 1, 2).

Regarding claim 25, Unger et al. discloses the measuring system comprises:

at least one temperature sensor (48);

a holding element (50) for holding the at least one temperature sensor (Fig. 3); and

a connection device (40) for connection to the evaluation device (Fig. 3).

Regarding claim 26, Unger et al. discloses the holding element is connected to the heat exchanger in a non-releasable manner (column 4, lines 54-58).

Regarding claim 27, Unger et al. discloses the holding element for holding the temperature sensor has a holder (means for holding 48 within 50) which corresponds to said temperature sensor (column 3, lines 45-47).

Regarding claim 28, Unger et al. discloses the temperature sensor has a predetermined breaking point and is connected to the holding element such that it is rendered permanently inoperable after it is removed from the holding element (column 4, lines 58-60).

Regarding claim 29, Unger et al. discloses the temperature sensor is a constituent part of an adapter (low speed serial data capability, column 3, lines 47-48) of the connection device (column 3, lines 45-48).

Regarding claim 30, Unger et al. discloses the adapter and the holding element have corresponding fastening elements (permanent coupling, column 4, lines 58-60) which are designed such that they cannot be released following assembly (suggested by "permanent" coupling).

Regarding claim 33, Unger et al. discloses said evaluation device is configured to:

determine an expected time gradient of measured temperature of the heat-exchanger medium (characteristic signature temperature jump, column 4, lines 20-40);

determine a current time gradient of said measured temperature of the heat-exchanger medium (ECU 42 observes current temperature behavior, column 4, lines 31-33); and

detect presence of a prescribed heat exchanger based on said expected and current time gradients (column 4, lines 31-36).

Allowable Subject Matter

Claims 19, 22, 31, and 32 are allowed.

Reasons For Allowance

The **combination** as claimed wherein a method or system for detecting the presence or absence of a prescribed heat exchanger comprising comparing the plotted current operationally relevant parameters with predefined values; determining an associated current operating state in accordance with this comparison (claim 19) or incrementing at least one counter in accordance with the comparison result; carrying out method steps until a predefined counter reading is reached (claim 22) or a data memory for storing predefined threshold values, operating state data and other data; and at least

one counter (claim 31) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

Applicant's arguments filed March 14, 2008 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that Unger uses a method in which the radiator inlet temperature, not the medium temperature, is used to observe the "characteristic jump".

Examiner's position is that Unger discloses that the temperature at the inlet to the radiator (16) is the temperature of the medium (coolant) when it flows into the radiator (16) (column 4, lines 21-23). Thus, Unger uses a method in which the medium temperature (coolant's temperature), is used to observe the "characteristic jump".

Applicants further argue that the jump is measured from the engine compartment temperature.

Examiner's position is that the jump is measured from the coolant temperature at the inlet of the radiator (16) (column 4, lines 20-23). The jump is "from a temperature

approximately that of the engine compartment vehicle to approximately 90° C" (column 4, lines 26-28). Thus, the jump is not necessarily measured from the engine compartment temperature.

Applicants further argue that Unger does not determine expected and current time gradients of the heat exchanger medium for detecting the presence of the prescribed heat exchangers.

Examiner's position is that Unger discloses determining expected and current time gradients (changes in time, transition time of temperature jump = 4 seconds, Fig. 4) of the heat exchanger medium (coolant) for detecting the presence of the prescribed heat exchangers (column 4, lines 31-36).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael P. Nghiem/

Primary Examiner, GAU 2863

June 14, 2008